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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,483	02/22/2002	Robert Farr	F3284(C)	1491
201	7590 08/02/2005		EXAM	INER
	INTELLECTUAL PRO	MADSEN, ROBERT A		
700 SYLVAN AVENUE, BLDG C2 SOUTH ENGLEWOOD CLIFFS, NJ 07632-3100			ART UNIT	PAPER NUMBER
			1761	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
•	10/081,483	FARR ET AL.			
Office Action Summary	Examiner	Art Unit			
	Robert Madsen	1761			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address			
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the meanned patent term adjustment. See 37 CFR 1.704(b).	N. R.1.136(a). In no event, however, may a re- reply within the statutory minimum of thirt- iod will apply and will expire SIX (6) MON stute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 02	<u> 2 May 2005</u> .				
2a)☐ This action is FINAL . 2b)⊠ T	•				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
closed in accordance with the practice unde	er Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.			
Disposition of Claims					
	Claim(s) <u>1 and 3-19</u> is/are pending in the application.				
4a) Of the above claim(s) <u>19</u> is/are withdraw	n from consideration.				
5) Claim(s) is/are allowed.		•			
6) Claim(s) <u>1,3-18</u> is/are rejected. 7) Claim(s) is/are objected to.		•			
8) Claim(s) are subject to restriction and	d/or election requirement.				
•					
Application Papers					
9) The specification is objected to by the Exam					
10) The drawing(s) filed on is/are: a) a					
Applicant may not request that any objection to t	• • • • • • • • • • • • • • • • • • • •	• •			
Replacement drawing sheet(s) including the corn 11) The oath or declaration is objected to by the	,	• • •			
Priority under 35 U.S.C. § 119					
12) ☐ Acknowledgment is made of a claim for fore a) ☐ All b) ☐ Some * c) ☐ None of:	ign priority under 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority docume	ents have been received.				
2. Certified copies of the priority docume	ents have been received in A	pplication No			
3. Copies of the certified copies of the p	•	received in this National Stage			
application from the International Bur	, , , , , , , , , , , , , , , , , , , ,				
* See the attached detailed Office action for a	ilst of the centiled copies not	receivea.			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview S	summary (PTO-413)			
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	s)/Mail Date			
 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/ Paper No(s)/Mail Date 	08) 5)	nformal Patent Application (PTO-152)			
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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 2, 2005 has been entered. Claims 1, 3-19 remain pending in the application. Claim 19 was withdrawn from further consideration for being directed to a non-elected invention.
- 2. In light of the amendment, the objection of claims 5 and 6 has been withdrawn.
- 3. With respect to the new limitation "the valve is opened via the consumer's mouth" in claim 1, it is noted that claim 1 is a product claim, and for examination purposes this limitation is read as "the valve is capable of being opened via the consumer's mouth".

Claim Rejections - 35 USC § 102

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 1,3,5-8,15,16 are rejected under 35 U.S.C. 102(b) as being anticipated by Frutin (WO 9836671).
- 6. Frutin teaches a frothed beverage that include a sparingly soluble effervescence inducing gas, such as nitrogen, nitrous oxide, or carbon dioxide providing a head space

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that occupies 10-80% of the container at a pressure of at least 2.5 (e.g. 55 psi up to 120 psi) at 5°C, that is held in a container with an aerosol valve that is biased closed, which would prevent opening when inverted. The pressure in the head space above the liquid in the container is sufficient to cause the beverage to be discharged into the mouth of the consumer, since 55 psi is capable of forcing the product to be discharged (Page 1, lines 1-10, Page 2, line 36 to Page 4, line7, Page 4, lines 19-26, Page 5, line 1to Page 6, line 15, Page 8, lines 13-26, Page 12, lines 22-34, Page 18-20).

7. Furthermore, with respect to the limitation valve being capable of opening via consumer's mouth, Frutin teaches the valve may be a tilt valve (Page 4, lines 5 and 6), which would inherently be capable of opening via a consumer's mouth by placing the valve in the consumer's mouth and having the consumer either grasp the valve between his teeth to tilt the valve or placing the valve against the upper or lower row of teeth and forcing the container, respectively, upwards or downwards, to tilt the valve.

Claim Rejections - 35 USC § 103

- 8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as applied to claims1,3,5-8,15,16 further in view of Kohler et al. (US 5143288).
- 10. Frutin teaches an aerosol valve and teaches features may be provided to urge remaining beverage in the container, which may have become effervescent, out of the

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container (Page 4, lines 19-26), but is silent in teaching a dip tube that urges the effervescent fluid out of the container, as recited in claim 12, with holes that communicate with the headspace as recited in claim 13.

- 11. Kohler et al. also teach aerosol valves for a container comprising a liquid and nitrogen system at similar pressures (e.g. up to 120 psi), and teach that one can maintain a constant pressure to urge the material out of the container, even as the level reaches the bottom of the container, by providing a dip tube with a hole in communication with the headspace of the container. Kohler et al. teach the desired discharge pressure is maintained by allowing gas residing in the headspace to mix with the liquid as it travels up the dip tube, and that the actual location depends on the desired discharge consistency (Column 1, line 49-67, Column 3, lines 5-55, Column 5, line 50 to Column 6, line 35). Therefore, it would have been obvious to include a hole in communication with the headspace of the container of Frutin since Frutin teaches providing features to urge a remaining nitrogen effervesced beverage out of the container using an aerosol valve, and Kohler et al. providing an aerosol valve with a dip tube with a hole in communication with the headspace of a container will assure that one could urge all of the liquid out of the container and a more consistent amount of gas, such as nitrogen, is mixed with liquid.
- 12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) in view of Kohler et al. (US 5143288) as applied to claims 12 and 13 above, further in view of Berg Jr. et al. (US 3947567).

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- 13. Frutin teaches the amount of gas discharged with the liquid when the effervesced liquid is expelled depends on the size of the headspace and the pressure of the gas in the headspace (Page 20, lines 17-19_. However, Frutin is silent in teaching any particular amount of gas discharged with the liquid.
- 14. Berg et al. also teach compositions for forming effervescent liquids. In explaining the particular desired degree of effervescence for products of Berg et al., Berg et al. teach the conventional effervescent beverage is 1 volume of gas per volume of liquid. (Column 4, line 39 to Column 5, line 16, Column 5, lines 62-66, Column 6, lines 5-53, and Column 6, line 62 to Column 7, line 4). Therefore, it would have been obvious to further modify Frutin such that the volume ratio of gas to liquid is at least 0.5 to 1 when the beverage is expelled since Frutin teaches one may adjust the head space and pressure to provide a desired gas to liquid ratio for the expelled beverage and Berg teaches the conventional effervescent beverage has a gas to liquid volume ratio is 1:1.
- 15. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frutin (WO 9836671) as applied to claims 1,3,5-8,15,16 further in view of (Frutin WO 97/21605)
- 16. Frutin '671 teaches the container may be fitted with a device which injects flavor into the container (Page 13, line 33 to Page 14, line 5), such as a modified version of Frutin '605 (Page 6, lines 6-15), and Frutin '605 teaches including a container a supplemental compartment with a sparingly soluble effervescence inducing gas and a liquid that releases the contents upon opening the container, or relieving the pressure

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within the container (Page 4, lines 16-23, Page 14, lines 23-36, and the embodiments of 16-18). Therefore, it would have been obvious to modify Frutin '671 and include a widget for releasing the gas and a flavor when the valve is opened, since Frutin '671 teaches this may be done using a modified container of Frutin '605, and Fruitn'605 teaches widgets for a container to supply a sparingly soluble effervescence inducing gas and a flavor liquid upon releasing the pressure within the container.

- 17. Claims 1,4,9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357).
- 18. Regarding claims 1,4, 9, 10,Hoffman teaches an oxygenated beverage, which is effervescent (i.e. oxygen saturated similar to carbon dioxide saturated beer and sparkling wine), wherein the beverage is tea, coffee, root beer, or water, held in a container at 2-6 atmospheres, can reduce or control halitosis, and may be taken via ingestion or spraying, which would involve a valve structure (Column 2, lines 20-65, Column 3, line 10 to Column 4, line 67). Hoffman is silent in teaching the particular temperature at which the beverage is stored and that the valve structure is capable of being operated by a consumer's mouth as recited in claim 1, such as with an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing as recited in claim 10.
- 19. With respect to the recited valve structure, Denton et al. teach it is advantageous to provide an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing when a person is required to keeps both hands

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free to do something else. Denton et al. teach such an actuator/valve combination that is easy to use, inexpensive, does not leak, and can be used in combination with a variety of pressurized containers(Column 1, lines 10-43, Column 2, lines 10-41, column 4, lines 41-59, Column 6, lines 29-41, Column 7, lines 5-27). Therefore it would have been obvious to include an actuator to opens the valve that is shaped and positioned for engagement in a user's mouth or teeth for dispensing since Denton et al. teach an bite actuator/valve combination that is easy to use, inexpensive, does not leak, can be used in combination with a variety of pressurized containers, and offers the advantaged of allowing a person to keeps both hands free to do something else while consuming a beverage.

20. With respect to the particular temperature in combination with the 2-6 atmospheres pressure, Hoffman teaches the amount of oxygen dissolved at a given pressure depends on the particular temperature of the container and the amount of oxygen dissolved affects the ability of the beverage to control or eliminate halitosis, as well as the stored beverage's own susceptibility to microbial growth (Column 2, line 45 to column 3, line 7, Table 1). Therefore, it would have been obvious to select any particular storage temperature between 5-15°C, depending on (1) the type of beverage (e.g. root beer, which is normally chilled), (2) the desired level of oxygenation and effectiveness at controlling halitosis as compared to the amount of microbial risk.

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21. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman (US 5747079) in view of Denton et al. (US 5971357), as applied to claims 1,4,9, and 10 above, further in view of Bergman (SE9801752 A).

- 22. Modified Hoffman is silent in teaching a button on the bite valve to consume the beverage, which may be tea, coffee, water, or root beer.
- 23. Bergman teaches a water dispensing valve operated by biting, but additionally utilizes a button to control the amount dispensed based on the bite pressure applied to the button (English Abstract). Therefore, it would have been obvious to modify Hoffman and include a button on the bite-valve, since Bergman teaches this provides a means for controlling the dispensing amount by bite pressure and one would have been substituting one conventional bite-valve for another for the same purpose: dispensing water.

Response to Arguments

- 24. Applicant's arguments filed May 2, 2005 have been fully considered but they are not persuasive.
- 25. Applicant contends that Frutin'671 is directed to a method of producing a frothed liquid wherein the consumer must shake the container to dissolve the gas and uses a serrated nozzle for discharging whip cream, but does Frutin '671 does not suggest discharge into the mouth of the consumer via positive pressure wherein the liquid is effervescent. First, it is noted that claim 1 merely requires that a container/valve assembly be *capable* for discharge into a consumer's mouth. It is notoriously well known that containers with serrated nozzles used for discharging whip cream *are*

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capable ,suitable, and conventional for discharging into the mouth of a consumer. Second, Frutin '671 does teach dispersing sparingly soluble gases to form an effervescent beverage prior to dispensing and Gruenewald '599 is provided as evidence that the art recognizes the beverage of Frutin '671 to be effervescent (See Column 1, lines 34-48). Third, the tilt valve taught by Frutin, or serrated nozzle embodiment ,is operated by positive pressure and , for the reasons discussed in the rejection above, is *capable* of being opened by a consumer's mouth.

With respect to Hoffman, Applicant contends that Hoffman does not suggest 26. ingestion of the beverage or that the valve the beverage is to be fed directly to the mouth of a consumer by a valve opened by a consumer's mouth. Applicant further contends that Denton et al. cannot be combined with Hoffman because apparently Denton et al. teach a mouth operated valve limited to use with people in protective suits (i.e. for laboratories, hospitals, pilots, etc.) First, Applicant's attention is directed to Column 2, lines 7-17 of Hoffman: one of the advantages of the invention is that is an ingestible beverage. Second, as discussed above in the rejection, Hoffman teaches the beverage is tea, coffee, root beer, or water, in a container. Third, Denton et al. teach a mouth operated valve to discharge a beverage from a container so that a consumer can drink hands free, which is not limited to people in "protective suits" because (1) Denton et al. set out to solve the problem of driving or riding a bike and operating a beverage container valve in addition (Column 1, lines 21-31) and (2) the valve of Denton is intended to be used with "conventional" beverage containers (Column 4, line 60 to Column 5, line 10).

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27. With respect to Bergman, Applicant contends that there is no motivation to combine a halitosis treatment with water dispensing bite valve. As discussed in the rejection above, Bergman teaches a bite valve to dispense water and Modified Hoffman includes a bite valve to dispense water. One is merely substituting one type of valve design for another for the same purpose: dispensing water.

- 28. Regarding the combination of Kohler et al., Applicant insists that Frutin '671 does not teach dispensing a pressurized beverage. As discussed above relative to Frutin '671, Frutin '671 is not limited to negative pressure dispensing mechanism, rather Frutin '671 includes a positive pressure operated tilt valve for a pressurized beverage.
- 29. Regarding the combination with Berg et al., Applicant insists that Frutin '671 does not teach dispensing a pressurized beverage. As discussed above relative to Frutin '671, Frutin '671 is not limited to negative pressure dispensing mechanism, rather Frutin '671 includes a positive pressure operated tilt valve for a pressurized beverage.

 Additionally, as discussed in the rejection above, Frutin '671 teaches the amount of gas discharged with the liquid when the effervesced liquid is expelled depends on the size of the headspace and the pressure of the gas in the headspace Berg et al. teach the conventional effervescent beverage is 1 volume of gas per volume of liquid.
- 30. Regarding the combination with Frutin '605, Applicant insists that Frutin '671 does not teach dispensing a pressurized beverage. As discussed above relative to Frutin '671, Frutin '671 is not limited to negative pressure dispensing mechanism, rather Frutin '671 includes a positive pressure operated tilt valve for a pressurized beverage. Additionally, as discussed in the rejection above, Frutin '671 teaches the container may

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be fitted with a device which injects flavor into the container, such as a modified version of Frutin '605, and Frutin '605 teaches including a container a supplemental compartment with a sparingly soluble effervescence inducing gas and a liquid that releases the contents upon opening the container, or relieving the pressure within the container.

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Conclusion

- 31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 8:00AM-4:30PM M-F.
- 32. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 33. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Madsen

Examiner

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